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Acute Coronary Syndromes

DIFFERENTIAL USE BETWEEN PRASUGREL AND TICAGRELOR IN PATIENTS WITH ACUTE CORONARY SYNDROME UNDERGOING PERCUTANEOUS CORONARY INTERVENTION IN ROUTINE PRACTICE

Poster Contributions
Hall C
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Session Title: Contemporary Perspectives on Anti Platelet Pharmacodynamics and Pharmacokinetics
Abstract Category: 3. Acute Coronary Syndromes: Therapy
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Background: Randomized trials show efficacy of prasugrel (pras) or ticagrelor (ticag) over clopidogrel, in acute coronary syndrome (ACS) patients (pts) managed with percutaneous coronary intervention (PCI). Since the selection of pts for use of pras or ticag has not been studied, a retrospective study was conducted to understand the real-world treatment patterns in these patients.

Methods: The IMS Patient-Centric Data Warehouse was used to identify ACS-PCI pts >18 years with an in-hospital claim for pras or ticag between 8/1/2011 and 4/30/2013. Baseline characteristics were evaluated using data from index and prior hospitalization, outpatient, and emergency department records with T test used for continuous and Chi-square test used for categorical variables.

Results: The study included 16,098 pts treated with pras (n=13,134) or ticag (n=2,964). Compared with pras, ticag pts were older, more often female, had higher frequency of cardiovascular risk factors, and more frequently treated at a teaching hospital (Table). There was a higher frequency of unstable angina and dyslipidemia in pras pts with no difference in the type of myocardial infarction between the 2 groups. **Conclusion:** Observed data reveal differential use of pras or ticag in routine clinical practice, which may be guided by the drugs' labeled warnings, and suggest physicians do not view these drugs as interchangeable. Adequate adjustments are needed when comparing clinical outcomes between ticag and pras based on observational data.

	Prasugrel (n=13,134)	Ticagrelor (n=2964)	P-value
Demographics			
Age ± SD (years)	58.6±10.8	64.1±12.4	<0.0001
≥75 years (%)	6.5	23.6	<0.0001
Female (%)	26.7	33.4	<0.0001
Diagnosis at Index Hospitalization (%)			<0.0001
STEMI	38.6	39.6	
NSTEMI	36.4	37.2	
UA	21.6	18.5	
Comorbidities (%)			
Ischemic heart disease	26.2	29.9	<0.0001
Cerebrovascular disease	4.8	9.7	<0.0001
Transient ischemic attack/any stroke	2.0	5.4	<0.0001
Hypertension	35.4	41.1	<0.0001
Diabetes	37.3	35.9	0.1488
Dyslipidemia	77.9	74.3	<0.0001
Congestive heart failure	6.9	10.2	<0.0001
Chronic obstructive pulmonary disease	12.9	15.8	<0.0001
Asthma	6.6	7.4	0.1695
Chronic kidney disease	8.4	12.9	<0.0001
Anemia	8.9	13.0	<0.0001
Stent type			
Bare metal	19.7	20.8	0.2119
Drug eluting	77.5	75.9	0.069
Hospital type (%)			<0.0001
Teaching	42.6	54.2	
Non-teaching	46.5	38.3	